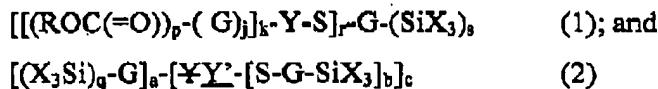


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IN THE CLAIMS

1. (Currently Amended) A blocked mercaptosilane selected from the group consisting of:



wherein

i) for structures (1) and (2), Y is a polyvalent species (Q), A(=E) selected from the group consisting of -C(=NR)-; -SC(=NR)-; -SC(=O)-; -S(=O)-; -S(=O)\_2-; -OS(=O)\_2-; (-NR)S(=O)\_2-; -SS(=O)-; -OS(=O)-; (-NR)S(=O)-; -SS(=O)\_2-; ~~-(-S)P(=O)-; -P(=O)(-)2; -(-S)P(=S)-; -P(=S)(-)2; (-NR)2P(=O)-; (-NR)(-S)P(=O)-; (-O)(-NR)P(=O)-; (-O)P(=O)-; -(-NR)P(=O)-; (-NR)2P(=S)-; (-NR)(-S)P(=S)-; (-O)(-NR)P(=S)-; -(-O)P(=S)-; and -(-NR)P(=S)-;~~

ii) for structure (1), Y is a polyvalent species (Q), A(=E) selected from the group consisting of ~~-(-S)P(=O)-; -P(=O)(-)2; -(-S)P(=S)-; -P(-S)(-)2; -(-O)P(=O)-; and -(-O)P(=S)-~~; Y is a polyvalent species (Q), A(=E) selected from the group consisting of -C(=NR)-; -SC(=NR)-; -SC(=O)-; -S(=O)-; -S(=O)\_2-; -OS(=O)\_2-; (-NR)S(=O)\_2-; -SS(=O)-; -OS(=O)-; (-NR)S(=O)-; -SS(=O)\_2-; (-NR)\_2P(=O)-; (-NR)(-S)P(=O)-; (-O)(-NR)P(=O)-; -(-NR)P(=O)-; (-NR)2P(=S)-; (-NR)(-S)P(=S)-; (-O)(-NR)P(=S)-; and -(-NR)P(=S)-;

wherein the atom A, attached to unsaturated heteroatom E is attached to the sulfur which in turn is linked via a group G to the silicon atom;

each R is chosen independently from hydrogen, straight, cyclic, or branched alkyl that may or may not contain unsaturation a carbon-carbon double bond, an alkenyl groups, an aryl groups, and and/or an aralkyl groups, with each R contains containing from 1 to 18 carbon atoms;

each G is independently a monovalent or polyvalent group derived by substitution of alkyl, alkenyl, aryl, or aralkyl wherein G can contain from 1 to 18 carbon atoms, wherein at least one G is polyvalent, and if G is univalent monovalent, G can be a hydrogen atom;

X is independently selected from the group consisting of -Cl, -Br, RO-, RC(=O)O-, R<sub>2</sub>C=NO-, R<sub>2</sub>NO-, R<sub>2</sub>N-, -R, and -(OSiR<sub>2</sub>)<sub>2</sub>(OSiR<sub>3</sub>) wherein each R is as above and at least one X is not -R;

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p is 0 to 5; r is 1 to 3; z is 0 to 2; q is 0 to 6; a is 0 to 7; b is 1 to 3; j is 0 to 1, but it may be 0 only if p is 1; c is 1 to 6; t is 0 to 5; s is 1 to 3; k is 1 to 2; with the provisos that (I) if A is carbon, sulfur, or sulfonyl, then (i) a + b is 2 and (ii) k is 1; (II) if A is phosphorusphosphorous, then a + b is 3 unless both (i) c is greater than 1 and (ii) b is 1, in which case a is c + 1; and (III) if A is phosphorusphosphorous, then k is 2 and G is a monovalent or polyvalent group derived by substitution of alkyl, alkenyl, aryl, or aralkyl wherein G contains from 1 to 18 carbon atoms.

2. (Original) A blocked mercaptosilane according to claim 1 wherein R is selected from the group consisting of methyl, ethyl, propyl, isobutyl, phenyl, tolyl, phenethyl, norbornyl, norbornenyl, ethynorbornyl, ethynorbornenyl, ethylcyclohexyl, ethylcyclohexenyl, and cyclohexylcyclohexyl.

3. (Previously Presented) A blocked mercaptosilane according to claim 1 according to formula (1).

4. (Withdrawn) A blocked mercaptosilane according to claim 1 according to formula (2).

5. (Original) A blocked mercaptosilane according to claim 1 which has been partially hydrolyzed.

6. (Currently Amended) A blocked mercaptosilane according to claim 1 wherein Y is selected from the group consisting of: -SC(=O)-; -S(=O)-; -OS(=O)-; -(-S)P(=O)-; and -P(=O)(-); and wherein Y' is selected from the group consisting of: -SC(=O)-; -S(=O)-; -OS(=O)-; and -P(=O)(-).

7. (Withdrawn) The blocked mercaptosilane of claim 1 wherein Y is selected from the group consisting of -C(=NR)- and -SC(=NR)-.

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8. (Withdrawn) The blocked mercaptosilane of claim 1 wherein Y is selected from the group consisting of  $-S(=O)_2-$ ;  $-OS(=O)_2-$ ;  $(-NR)S(=O)_2-$ ;  $-SS(=O)-$ ;  $(-NR)S(=O)-$ ;  $-SS(=O)_2-$ .

9. (Withdrawn) The blocked mercaptosilane of claim 1 wherein Y is selected from the group consisting of  $(-S)_2P(=O)-$ ;  $-(-S)P(=O)-$ ;  $-P(=O)(-)$ ;  $(-S)_2P(=S)-$ ;  $-(-S)P(=S)-$ ;  $-P(=S)(-)$ ;  $(-NR)_2P(=O)-$ ;  $(-NR)(-S)P(=O)-$ ;  $(-O)(-NR)P(=O)-$ ;  $(-O)(-S)P(=O)-$ ;  $(-O)_2P(=O)-$ ;  $-(-O)P(=O)-$ ;  $-(-NR)P(=O)-$ ;  $(-NR)_2P(=S)-$ ;  $(-NR)(-S)P(=S)-$ ;  $(-O)(-NR)P(=S)-$ ;  $(-O)(-S)P(=S)-$ ;  $(-O)_2P(=S)-$ ;  $-(-O)P(=S)-$ ; and  $-(-NR)P(=S)-$ .

10. (Original) A blocked mercaptosilane according to claim 1 wherein the sum of the carbon atoms within the G groups within the molecule is from 3 to 18.

11. (Original) A blocked mercaptosilane according to claim 1 wherein X is selected from the group consisting of methoxy, ethoxy, isobutoxy, propoxy, isopropoxy, acetoxy, and oximato.

12. (Original) A blocked mercaptosilane according to claim 1 wherein p is 0 to 2; X is RO- or  $RC(=O)O-$ ; R is selected from the group consisting of hydrogen, phenyl, isopropyl, cyclohexyl, isobutyl; and G is a substituted phenyl or substituted straight chain alkyl of  $C_2$  to  $C_{12}$ .

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13. (Withdrawn) A blocked mercaptosilane of the formula

$X_3SiGSC(=O)GC(=O)SGSiX_3$ , wherein

each R is chosen independently from hydrogen, straight, cyclic, or branched alkyl that may or may not contain unsaturation, alkenyl groups, aryl groups, and aralkyl groups, with each R containing from 1 to 18 carbon atoms;

each G is independently a divalent group derived by substitution of alkyl, alkenyl, aryl, or aralkyl, wherein G can contain from 1 to 18 carbon atoms, with the proviso that G is not such that the blocked mercaptosilane would contain an  $\alpha,\beta$ -unsaturated carbonyl including a carbon-carbon double bond next to the thiocarbonyl group;

X is independently selected from the group consisting of -Cl, -Br, RO-, RC(=O)O-, R<sub>2</sub>C=NO-, R<sub>2</sub>NO-, R<sub>2</sub>N-, -R and -(OSiR<sub>2</sub>)<sub>t</sub>(OSiR<sub>3</sub>) wherein each R is as above and at least one X is not -R; and

t is 0 to 5.

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33. (Withdrawn) A blocked mercaptosilane selected from the group consisting of:

$[(ROC(=O))_p-(G)]_k-Y-S]-G-(SiX_3)_z$  (1); and

$[(X_3Si)_q-G]_s-Y-[S-G-SiX_3]_b]_c$  (2)

wherein

Y is  $-OC(=O)-$ ;

each R is chosen independently from hydrogen, straight, cyclic, or branched alkyl that may or may not contain unsaturation, alkenyl groups, aryl groups, and aralkyl groups, with each R containing from 1 to 18 carbon atoms;

each G is independently a monovalent or polyvalent group derived by substitution of alkyl, alkenyl, aryl, or aralkyl, wherein G can contain from 1 to 18 carbon atoms, and if G is univalent, G can be a hydrogen atom;

X is independently selected from the group consisting of  $-Cl$ ,  $-Br$ ,  $RO-$ ,  $RC(=O)O-$ ,  $R_2C=NO-$ ,  $R_2NO-$ ,  $R_2N-$  and  $-R$  wherein each R is as above and at least one X is not  $-R$ ;

p is 0 to 5; r is 1 to 3; z is 0 to 2; q is 0 to 6; a is 0 to 7; b is 1 to 3; j is 0 to 1, but it may be 0 only if p is 1; c is 1 to 6; t is 0 to 5; s is 1 to 3; k is 1 to 2; with the provisos that (I) if A is carbon, sulfur or sulfonyl, then (i) a + b is 2 and (ii) k is 1; (II) if A is phosphorus, then a + b is 3 unless both (i) c is greater than 1 and (ii) b is 1, in which case a is c + 1; and (III) if A is phosphorus, then k is 2.

34. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein R is selected from the group consisting of methyl, ethyl, propyl, isobutyl, phenyl, tolyl, phenethyl, norbornyl, norbornenyl, ethylnorbornyl, ethylnorbornenyl, ethylcyclohexyl, ethylcyclohexenyl, and cyclohexylcyclohexyl.

35. (Withdrawn) A blocked mercaptosilane according to claim 33 according to formula (1).

36. (Withdrawn) A blocked mercaptosilane according to claim 33 according to formula (2).

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37. (Withdrawn) A blocked mercaptosilane according to claim 33 which has been partially hydrolyzed.

38. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein the sum of the carbon atoms within the G groups within the molecule is from 3 to 18.

39. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein X is selected from the group consisting of methyoxy, ethoxy, isobutoxy, propoxy, isopropoxy, acetoxy, and oximato.

40. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein p is 0 to 2; X is RO- or RC(=O)O-; R is selected from the group consisting of hydrogen, phenyl, isopropyl, cyclohexyl, isobutyl; and G is a substituted phenyl or substituted straight chain alkyl of C<sub>2</sub> to C<sub>12</sub>.